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School Name:_____________________________ Student Name:______________________Roll #:_______

TEST	***BIOLOGY 9th***	CHAPTER # 3 & 4

Time: 1 hour **Total Marks: 40**

SECTION-I

Q.No.1. Encircle the correct answer from the following choices. (20x1=20)

درج ذیل میں سے درست جواب کا انتخاب کریں اور اس کے گرد دائرہ لگائیں۔

1. A set of related genera would be grouped into:

(a)	phylum	(b)	order	(c)	family	(d)	class

2. Each rank of classification is called a:

(a)	species	(b)	taxon	(c)	taxa	(d)	phylum

3. A genus is a group of related:

(a)	orders	(b)	species	(c)	classes	(d)	families

4. A group of related species is:

(a)	kingdom	(b)	genus	(c)	phylum	(d)	order

5. Which of these organelles have their own DNA?

(a)	golgi bodies	(b)	chloroplast	(c)	mitochondria	(d)	nucleus

6. The microscopic study of tissues is called:

(a)	physiology	(b)	histology	(c)	anatomy	(d)	morphology

7. The function of mitochondria is:

(a)	lipids storage	(b)	protein synthesis	(c)	cellular respiration	(d)	photosynthesis

8. Name of mature bone cells are:

(a)	osteocytes	(b)	chondrocyte	(c)	oocytes	(d)	tendons

9. Cell wall of fungi has:

(a)	protein	(b)	chitin	(c)	cellulose	(d)	fats

10. Basic unit of classification is:

(a)	taxon	(b)	species	(c)	genus	(d)	order

11. Proposed three kingdom classification:

(a)	Ernst hackle	(b)	E. Chatton	(c)	king	(d)	Linnaeus

12. Which is the national animal of Pakistan?

(a)	Chakor	(b)	Markhor	(c)	Ibex	(d)	Urial

13. The order of human according to classification is:

(a)	Pisum	(b)	Hominidae	(c)	Primates	(d)	Mammalia

14. Bacteria are assigned to the kingdom:

(a)	fungi	(b)	monera	(c)	portista	(d)	porifea

15. Who introduced the system of classification of organisms for the first time?

(a)	Ernst Hackel	(b)	Aristotle	(c)	Carlous Linnaeus	(d)	Robert Whittaker

16. The chloroplast function is:

(a)	ATP synthesis	(b)	protein synthesis	(c)	photosynthesis	(d)	DNA replicate

17. Plant nucleus discovered in:

(a)	1932	(b)	1931	(c)	1731	(d)	1838

18. Tissue also makes the glandular tissue in animals:

(a)	nervous tissue	(b)	epithelial tissue	(c)	connective tissue	(d)	Muscular tissue

19. The magnification of light microscope is:

(a)	500x	(b)	1000x	(c)	1500x	(d)	15000x

20. Which of these organelles have their own DNA?

(a)	golgi bodies	(b)	chloroplast	(c)	mitochondria	(d)	nucleus

SECTION-II

Q.No.2. Answer the following questions. درج ذیل سوالات کے جوابات دیں۔ **10x2=20**

1. Define genes.	**2.** Define the major functions of PER.
3. Define leucoplasts and give their role in plants.	**4.** What do you know about Marco Polo sheep?
5. What do you mean by soil erosion?	**6.** Write characteristics of kingdom monera.
7. Differentiate between autorobs and heterotrophs.	**8.** Write the name of any two sub cellular particles.
9. Define chloroplast and write its function also.	**10.** Define family and genus.

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School Name:______________________________ Student Name:_________________________Roll #:_______

TEST	MATHEMATICS 9th	CHAPTER # 3 & 4

Time: 1 hour **Total Marks: 40**

SECTION-I

Q.No.1. Encircle the correct answer from the following choices. **(20x1=20)**

درج ذیل میں سے درست جواب کا انتخاب کریں اور اس کے گرد دائرہ لگائیں۔

1. In $\log_x 64 = 2$, the value of x is:

(a)	64	(b)	2	(c)	64^2	(d)	8

2. log e = __________ where $e \approx 2.718$

(a)	0	(b)	0.4343	(c)	∞	(d)	1

3. If $y = \log_z x$ then _________:

(a)	$x^y = z$	(b)	$z^y = x$	(c)	$x^z = y$	(d)	$y^z = x$

4. The characteristics of 5.79:

(a)	1	(b)	0	(c)	-1	(d)	-2

5. The logarithm of any number of itself as a base is_______:

(a)	1	(b)	0	(c)	-1	(d)	10

6. If $\log_{64} 8 = \frac{x}{2}$,then the value of "x" is:

(a)	1	(b)	2	(c)	3	(d)	4

7. $\log_a a$ is equal to:

(a)	0	(b)	-1	(c)	1	(d)	10

8. $\log m^n$ =

(a)	$(\log m)^n$	(b)	m logn	(c)	n logm	(d)	log (mn)

9. Scientific notation of 0.0074 is:

(a)	7.4×10^{-3}	(b)	7.4×10^{4}	(c)	7.4×10^{-2}	(d)	7.4×10^{-4}

10. Scientific notation of 0.0643 is:

(a)	6.43×10^{-2}	(b)	6.43×10^{4}	(c)	6.43×10^{-4}	(d)	6.43×10^{2}

11. $\frac{a^2-b^2}{a+b}$ is equal to:

(a)	$(a-b)^2$	(b)	$(a+b)^2$	(c)	(a+b)	(d)	(a – b)

12. The degree of polynomial $4x^4+2x^2y$ is:

(a)	1	(b)	2	(c)	3	(d)	4

13. Every polynomial is____________ expression.

(a)	unreal	(b)	real	(c)	rational	(d)	irrational

14. Factor of $3x^2 - x - 2$

(a)	(x+1),(3x–2)	(b)	(x+1),(3x+2)	(c)	(x–1),(3x–2)	(d)	(x–1),(3x+2)

15. $(\sqrt{a}+\sqrt{b})(\sqrt{a}-\sqrt{b})$=

(a)	$a^2 + a^2$	(b)	$a^2 - b^2$	(c)	a + b	(d)	a – b

16. 4x+3y – 2 is an algebraic

(a)	expression	(b)	sentence	(c)	equation	(d)	inequation

17. $(3+\sqrt{2})(3-\sqrt{2})$ is equal to:

(a)	7	(b)	-7	(c)	-1	(d)	+1

18. $\frac{1}{a-b} - \frac{1}{a+b}$ is equal to:

(a)	$\frac{2a}{a^2-b^2}$	(b)	$\frac{2b}{a^2-b^2}$	(c)	$\frac{-2a}{a^2-b^2}$	(d)	$\frac{-2b}{a^2-b^2}$

19. The degree of polynomial $x^2y^2 + 3xy + y^3$

(a)	1	(b)	2	(c)	3	(d)	4

20. If x = 3 and y = -1 then the value of x^3y will

(a)	27	(b)	-27	(c)	9	(d)	-9

SECTION-II

Q.No.2. Answer the following questions. درج ذیل سوالات کے جوابات دیں۔ **10x2=20**

1. Find the value of $\log_{64} 8 = \frac{x}{2}$	**2.** Write in scientific notation: 0.0074	**3.** Find the value ofx: $\log_2 x = 5$
4. Define logarithm.	**5.** Simplify $\frac{x^2-4x+4}{2x^2-8}$	**6.** Factorize: $3x - 243x^3$
7. Define surd.	**8.** Write in scientific notation 0.00643	**9.** Simplify $\frac{(x+2)(x^2-1)}{(x+1)(x^2-4)}$
10. Rationalize the denominator: $\frac{1}{3+2\sqrt{5}}$		

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TEST	**PHYSICS 9th**	CHAPTER # 3 & 4

Time: 1 hour — Total Marks: 40

SECTION-I

Q.No.1. Encircle the correct answer from the following choices. (20x1=20)

درج ذیل میں سے درست جواب کا انتخاب کریں اور اس کے گرد دائرہ لگائیں۔

1. Newton's first law of moation is valid only in the absence of:
(a) force (b) net force (c) friction (d) momentum

2. Inertia depends upon:
(a) force (b) net force (c) mass (d) velocity

3. The SI unit of momentum is:
(a) Nm (b) $kgms^{-2}$ (c) Ns^{-1} (d) Ns

4. When a horse pulls a cart, the action is on the:
(a) cart (b) earth (c) horse (d) earth and cart

5. Which of the following material lowers friction when pushed between metal plates?
(a) water (b) fine marble powder (c) air (d) Oil

6. Mathematically momentums is defined as:
(a) $P = \frac{v}{m}$ (b) $P = mv^2$ (c) $P = (mv)^2$ (d) $P = mv$

7. 1 newton is equal to:
(a) $1\ kgms^{-2}$ (b) 1 kgms (c) $1\ kgm^{-1}s^{-1}$ (d) $1\ kg^{-1}m^{-1}s^{-1}$

8. The unit of weight in system international is:
(a) dyne (b) kg (c) pound (d) newton

9. Coefficient of friction is equal to:
(a) $\frac{F_S}{R}$ (b) $F_S R$ (c) $\frac{R}{F_S}$ (d) $F_s + R$

10. Rate of change of momentum is equal to:
(a) torque (b) force (c) mass (d) distance

11. Two equal but unlike parallel forces having different line of action produce:
(a) a torque (b) a couple (c) equilibrium (d) neutral equilibrium

12. The number of forces that can be added by head to tail rule are:
(a) 2 (b) 3 (c) 4 (d) Any number

13. In SI unit of torque is:
(a) Nm (b) Nm^{-1} (c) Nm^2 (d) Ns

14. A force of 10 N makes an angle of 90° with x-axis. Its horizontal component is:
(a) 10N (b) 5N (c) Zero (d) Maximum

15. Point of intersection of medians is the centre of gravity of a uniform.
(a) rod (b) circular ring (c) solid cylinder (d) triangular sheet

16. The turning effect of a force is called:
(a) momentum (b) torque (c) pressure (d) work

17. The mathematically form of the second condition of equilibrium is:
(a) $\sum \tau = 0$ (b) $\sum F = 0$ (c) $\sum P = 0$ (d) $\sum W = 0$

18. The number of perpendicular components of a force are:
(a) 1 (b) 2 (c) 3 (d) 4

19. A force of 10N is making an angle of 30° with the horizontal. Its horizontal component will be:
(a) 4N (b) 5N (c) 7N (d) 8.7N

20.In a right angled triangle, length of a base is 4cm and its hypotenuse is 5cm. The length of a perpendicular is:
(a) 1cm (b) 3 cm (c) 20cm (d) 9cm

SECTION-II

Q.No.2. Answer the following questions. درج ذیل سوالات کے جوابات دیں۔ **10x2=20**

1. Define dynamics.	**2. Define force.**
3. What is the SI unit of force? Define it.	**4. What are laws of motion?**
5. What is the law of inertia?	**6. Define axis of rotation of a body.**
7. Define centre of gravity.	**8. Define torque. Write its units.**
9. What is meant by a plumb line?	**10. What is equilibrium? Give one example.**

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School Name:______________________________ Student Name:_______________________Roll #:_______

TEST	CHEMISTRY 9th	CHAPTER # 3 & 4

Time: 1 hour | Total Marks: 40

SECTION-I

Q.No.1. Encircle the correct answer from the following choices. (20x1=20)

درج ذیل میں سے درست جواب کا انتخاب کریں اور اس کے گرد دائرہ لگائیں۔

1. How many blocks are in modern periodic table:

(a)	3	(b)	4	(c)	5	(d)	6

2. The vertical columns in the periodic table are called:

(a)	periods	(b)	atomic number	(c)	groups	(d)	atomic mass

3. The number of groups in periodic table is:

(a)	8	(b)	9	(c)	18	(d)	12

4. The horizontal lines are called:

(a)	periods	(b)	atomic number	(c)	groups	(d)	atomic mass

5. How many elements are present in 6th period:

(a)	2	(b)	8	(c)	18	(d)	32

6. Electronegativity of fluorine is:

(a)	2.0	(b)	3.0	(c)	4.0	(d)	5.0

7. The distance between the nuclei of two carbon atoms is:

(a)	115pm	(b)	110pm	(c)	140pm	(d)	154pm

8. 6th and 7th period of the long form of periodic table called:

(a)	short periods	(b)	normal periods	(c)	long periods	(d)	very long periods

9. The amount of energy given out when an electron is added to an atom is called:

(a)	lattice energy	(b)	ionization energy	(c)	electronegativity	(d)	electron affinity

10. The elements of groups seventeen are called:

(a)	carbon family	(b)	noble gases	(c)	alkaline earth metals	(d)	halogens

11. Which one is polar molecule:

(a)	O_2	(b)	Cl_2	(c)	HCl	(d)	H_2

12. Hydrogen bond is represented by:

(a)	dotted line	(b)	single line	(c)	double line	(d)	triple line

13. The boiling point of sodium chloride is:

(a)	800^{o}C	(b)	1413^{o}C	(c)	1450^{o}C	(d)	1477^{o}C

14. Which one of the following is soluble in water:

(a)	alcohol	(b)	ether	(c)	benzene	(d)	petrol

15. Molecule with double covalent bond is:

(a)	H_2	(b)	O_2	(c)	N_2	(d)	C_2H_2

16. How many electrons are involved in the formation of single covalent bond:

(a)	2	(b)	4	(c)	6	(d)	8

17. Covalent bond is found in methane:

(a)	single	(b)	double	(c)	triple	(d)	metallic

18. Bond is formed in C_2H_2 is:

(a)	single	(b)	double	(c)	triple	(d)	metallic

19. The atom providing lone pair of electrons in dative covalent bond is called:

(a)	acceptor	(b)	donor	(c)	electronegative	(d)	ionic bond

20. Which noble gas does not possess 8 electrons in their valence shell:

(a)	He	(b)	Ne	(c)	Ar	(d)	Xe

SECTION-II

Q.No.2. Answer the following questions. درج ذیل سوالات کے جوابات دیں۔ **10x2=20**

1. Define ionization energy with an example.	2. Define Mosley's periodic law?
3. What is meant by periodic functions?	4. Write the names of noble gases.
5. Differentiate between groups and periods.	6. Define coordinate covalent bond.
7. What is the difference between duplet and octet rule?	8. Why atoms form bond?
9. Define chemical bond with an example.	10. What is metallic bond.